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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,992	12/26/2001	Stephane Penain	FR 000156	9228

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BRIARCLIFF MANOR, NY 10510

EXAMINER

PATHAK, SUDHANSHU C

ART UNIT PAPER NUMBER

2634

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/032,992	Applicant(s) PENAIN ET AL.	
	Examiner Sudhanshu C. Pathak	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on August 1<sup>st</sup>, 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on August 1<sup>st</sup>, 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-to-2 are pending in the application.

#### ***Response to Arguments***

2. Applicant's arguments filed on August 1<sup>st</sup>, 2005 have been fully considered but they are not persuasive. In regards to the amendment filed as dated above:

- The objections in regards to the Abstract were not addressed in the amendment, thus the objections have been maintained.
- The objection in regards to the Title was not addressed in the amendment, and thus has been maintained.
- The arguments regarding to the objection to the specification for lacking section headings have been accepted and the objections have been withdrawn.
- The arguments regarding to the 112, first paragraph have been considered and are not persuasive. The arguments (Remarks, Page 4, Paragraph 2) discloses ".....applicant believes that the zero value has been inferred to be the known value representing an end marker or reference value. However, the zero values illustrated in the transmission block are valid values to be transmitted." It is not clear if the zero value is inferred to represent an end marker (as disclosed above) how can they be valid data values to be transmitted (as also disclosed above).
- The arguments regarding the Prior Art rejections have been considered and are not considered persuasive. The Bruder (5,283,646) reference

discloses a method and apparatus for encoding real time video data and further implementing MPEG video compression standard. Bruder also discloses each block of image data encoded in terms of differences between the data block and a reference data block wherein the reference data block is a zeroed reference block. (As is specified (Column, lines) in the rejection below). However, Bruder does not disclose transmitting an "end of transmission indicator" when the samples remain equal to the reference. This limitation is disclosed in the Morrissey (5,553,302) reference which discloses a bus subsystem for transmitting serial data comprising a frame recognition mechanism for recognizing a start-of-frame (SOF) or an end-of-frame (EOF) wherein the control information is protocol dependent. Therefore, it would have been obvious that the subject matter taught in Morrissey can be implemented in the MPEG system as described in Bruder so as to receive serial data and also know an end-of-transmission situation so as to stop receiving and this can be encoded with respect to a reference data block as also described in Bruder, so as minimize processor computation and errors.

### ***Specification***

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for

making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

**The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.**

4. The abstract of the disclosure is also objected to because:
  - The Abstract on line 3 discloses "an IS circuit" it is not clear what this acronym stands for.
  - The Abstract on line 10 discloses "Fig. 1." It is not clear what this refers to.
5. The title of the invention, "Transfer of a series of data" is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. A suggested title is "A method and apparatus for decoding a MPEG data". The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 & 2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Claims refer to "transmitting only a start of the series of samples which extends to the point where the samples that remain are equal to a reference".

The specification on Page 3, lines 3-13 discloses quantified coefficients are

represented by small squares wherein a white square represents quantified coefficients whose value is specified inside the square (Fig. 2), and a black square represents a quantified coefficient whose value is equal to zero (Fig. 2). The specification also discloses the scanning is stopped at the first black square. However, the specification on Page 3, line 11 and Fig. 2 also discloses a white square with a quantified coefficient value of zero, it is not clear as why this is not a black square and why the scanning does not stop at the first (black square) quantified coefficient value of zero and if it is the subsequent non-zero quantified coefficient (white square) is not scanned thus losing data value. It needs to be qualified as to when the "end of transmission" is implemented and how the above issue is resolved. Furthermore, it is not clear if the invention is implemented in the transmitter (encoder) or the receiver (decoder). It is assumed the quantizer is implemented in the encoder and a de-quantizer is implemented in the decoder.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1 & 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruder (5,283,646) in view of in Morrissey et al. (5,553,302).

Regarding to Claims 1 & 2, Bruder discloses a method and apparatus (data processing device) for encoding and decoding real time video data so as to transmit / receive the desired number of bits per frame (Abstract, lines 1-6 & Fig. 1 & Fig. 2 & Column 3, lines 24-40). Bruder also discloses implementing the method for MPEG video compression standard (Column 3, lines 25-40). Bruder also discloses the receiver comprising a decoder, a de-quantizer and an inverse DCT module and a reconstruction module (Fig. 2, elements 25-28 & Column 5, lines 38-65). Bruder also discloses "interframe" encoding/decoding wherein each block of image data in terms of the differences between the block of data and a reference block of data wherein the transmitter transmits the difference information to the receiver since the receiver maintains copies of the reference images so as to reconstruct the block of data by combining the difference information with the reference image (Column 3, lines 62-68 & Column 4, lines 1-2). Bruder also discloses the reference image to be a zeroed reference block (a block in which each pixel data equals zero) or the corresponding block of the last frame should be used as the reference for the current frame (Column 4, lines 3-15). However, Bruder does not disclose the data processing device to comprise a bus system to transfer a series of samples and further does not disclose transmitting an "end of transmission" indicator when the samples that remain are equal to the reference.

Morrissey discloses an input/output (I/O) subsystem for transmitting frames containing frame control data from a serial data transfer medium (Abstract, lines 1-2 & Column 1, lines 8-12 & Column 29, lines 50-60). Morrissey also discloses the

subsystem to include a sequence recognition mechanism for receiving and identifying any of a plurality of digital data bit sequences further comprising a frame recognition mechanism receives and identifies a start-of-frame (SOF) or an end-of-frame (EOF) delimiter from the data transfer medium (Abstract, lines 5-18).

Morrissey also discloses the frames transmitted are protocol dependent and further the control information in the frames is dependent on the (serial) protocol or standard implemented in the application to transfer the type of data (Column 1, lines 8-12, 47-67). Morrissey also discloses implementing the subsystem wherein the frame of data is transmitted over a serial data transfer medium (Column 4, lines 4-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Morrissey teaches an input / output subsystem for transmitting and receiving various control information including EOF and SOF for serial data protocols and this can be implemented in the MPEG system as described in Bruder so as to receive and identify multiple frames so as to further control the processing of the received frames and minimize processor computation and errors, thus satisfying the limitations of the claims.

### ***Conclusion***

**11. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not




mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571)-272-3056
- The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINE**  
**TECHNOLOGY CENTER 2600**